# BI-LEVEL

BIT & SWITCH NO.

| WORD | WORD DISPLAY | 1 OFF / 1 | 2 ON / 2 | 3 OFF / 3 | 4 ON / 4 | 5 OFF / 5 | 6 ON / 6 | 7 OFF / 7 | 8 ON / 8 | ↑ NASA 21 |
|---|---|---|---|---|---|---|---|---|---|---|
| B010 P13 - B01 → 08 | 44-2-0 | 6C8 | 6C9 | 6C10 | 6E1 | 6E2 | 6E3 | 6E4 | 6E5 | 01010101 |
| B010 P14 - F01 → 0B | 54-2-0 | 2E8 | 2E9 | 2E10 | 2G1 | 2G2 | 2G3 | 2G4 | 2G5 | BIT #3 MISSING |
| B010 P15 - A035 → 042 | 64-2-0 | 7A8 | 7A9 | 7A10 | 7C1 | 7C2 | 7C3 | 7C4 | 7C5 | |
| B010 P29 - B09 → 16 | 44-4-0 | 6E6 | 6E7 | 6E8 | 6E9 | 6E10 | 6G1 | 6G2 | 6G3 | |
| B010 P30 - F09 → 16 | 54-4-0 | 2G6 | 2G7 | 2G8 | 2G9 | 2G10 | 2I1 | 2I2 | 2I3 | |
| B010 P31 - A043 → 050 | 64-4-0 | 7C6 | 7C7 | 7C8 | 7C9 | 7C10 | 7E1 | 7E2 | 7E3 | |
| B010 P35 - A059 → 066 | 24-5-0 | 6I2 | 6I3 | 6I4 | 6I5 | 6I6 | 6I7 | 6I8 | 6I9 | BIT #7 MISSING |
| B010 P43 - A067 → 074 | 24-6-0 | 6I10 | 7A1 | 7A2 | 7A3 | 7A4 | 7A5 | 7A6 | 7A7 | |
| B010 P45 - B17 → 24 | 44-6-0 | 6G4 | 6G5 | 6G6 | 6G7 | 6G8 | 6G9 | 6G10 | 6I1 | |
| B010 P46 - F17 → 24 | 54-6-0 | 2I4 | 2I5 | 2I6 | 2I7 | 2I8 | 2I9 | 2I10 | 6A1 | |
| B010 P47 - A051 → 058 | 64-6-0 | 7E4 | 7E5 | 7E6 | 7E7 | 7E8 | 7E9 | 7E10 | 7G1 | 01010101 |

# BI LEVEL PULSE

BIT & SWITCH NO

| WORD | WORD DISPLAY | 11 OFF / 1 | 12 ON / 2 | 13 OFF / 3 | 14 ON / 4 | 15 OFF / 5 | 16 ON / 6 | 17 OFF / 7 | 18 ON / 8 | |
|---|---|---|---|---|---|---|---|---|---|---|
| P010 P33 - B25 → 32 | 4-5-0 | 6A2 | 6A3 | 6A4 | 6A5 | 6A6 | 6A7 | 6A8 | 6A9 | 10101010 |
| P010 P34 - F25 → 32 | 14-5-0 | 2C2 | 2C3 | 2C4 | 2C5 | 2C6 | 2C7 | 2C8 | 2C9 | |
| P010 P41 - B33 → 40 | 4-6-0 | 6A10 | 6C1 | 6C2 | 6C3 | 6C4 | 6C5 | 6C6 | 6C7 | |
| P010 P42 - F33 → 40 | 14-6-0 | 2C10 | 2E1 | 2E2 | 2E3 | 2E4 | 2E5 | 2E6 | 2E7 | 10101010 |

# BI-LEVEL FUNCTION

| WORD | PARAMETER NAME | LOCATION/FUNCTION |
|---|---|---|
| 1B010P13B01 | MANUAL RETRO-FIRE INITIATE | RETROGRADE |
| 2B010P13B02 | RETRO ROCKET NO.3 FIRE | RETROGRADE |
| 3B010P13B03 | RETRO ROCKET NO.2 FIRE | RETROGRADE |
| 4B010P13B04 | RETRO ROCKET NO.4 FIRE | RETROGRADE |
| 5B010P13B05 | EMERGENCY RETROFIRE SALVO RELAY | ABORT |
| 6B010P13B06 | PARACHUTE JETTISONED | LANDING |
| 7B010P13B07 | OXYGEN HIGH RATE | PRESSURE SUITS |
| 8B010P13B08 | SENSOR SEARCH MODE | HORIZON SENSOR OPERATION |
| 1B010P14F01 | | |
| 2B010P14F02 | | |
| 3B010P14F03 | | |
| 4B010P14F04 | | |
| 5B010P14F05 | PRIMARY LOOP PUMP A ON | COOLANT PUMPS |
| 6B010P14F06 | PRIMARY LOOP PUMP B ON | COOLANT PUMPS |
| 7B010P15F07 | SEC LOOP PUMP A ON | COOLANT PUMPS |
| 8B010P15F08 | SEC LOOP PUMP B ON | COOLANT PUMPS |
| 1B010P15A035 | 2ND STAGE CUT-OFF (IGS-CMD) | LAUNCH |
| 2B010P15A036 | S.C. SHAPED CHARGE FIRE | LAUNCH |
| 3B010P15A037 | L.V./S.C. SEPARATION | LAUNCH |
| 4B010P15A038 | BOOSTER CUT-OFF COMMAND | LAUNCH |
| 5B010P15A039 | | |
| 6B010P15A040 | ADAPTER SHAPED CHARGE FIRE | RETROGRADE |
| 7B010P15A041 | BIO MED T.R. NO.2 ON/OFF | DATA COMPUTER CONTROL |
| 8B010P15A042 | AUTO RETRO-FIRE INITIATION | RETROGRADE |

| | | |
|---|---|---|
| 1B010 P29 B09 | PITCH RATE GYRO, PRIMARY ON/OFF | DATA COMPUTER CONTROL |
| 2B010 P29 B10 | ROLL RATE GYRO, PRIMARY ON/OFF | DATA COMPUTER CONTROL |
| 3B010 P29 B11 | YAW RATE GYRO, PRIMARY ON/OFF | DATA COMPUTER CONTROL |
| 4B010.P29 B12 | ACME RATE CMD MODE ON/OFF | DATA COMPUTER CONTROL |
| 5B010P29 B13 | FORWARD | TRANSLATION CONTROL |
| 6B010P29 B14 | AFT | TRANSLATION CONTROL |
| 7B010P29 B15 | CALIBRATE | REFERENCE VOLTAGES (RV) |
| 8B010 P29 B16 | CAMERA EVENT | CAMERAS |
| 1B010P30 F09 | | |
| 2B010 P30 F10 | | |
| 3B010 P30 F11 | | |
| 4B010 P30F12 | | |
| 5B010P30 F13 | | |
| 6 B010 P30 F14 | | |
| 7B010 P30F15 | | |
| 8B010 P30F16 | | |
| 1B010 P31A043 | RETRO SECTION SEPARATION | RETRO GRADE |
| 2B010 P31 A044 | RETRO SHAPED CHARGE FIRE | RETROGRADE |
| 3B010 P31 A045 | RSR SECTION SEPARATION | LANDING |
| 4B010 P31A046 | PILOT CHUTE DEPLOYED | LANDING |
| 5B010 P31A047 | " | |
| 6B010 P31A048 | HORIZON SCAN (BINARY 001) | ATTITUDE-CONTROL MODE (3-BIT) |
| 7B010 P31A049 | RATE CMD-ORBIT (BINARY 010) | ATTITUDE-CONTROL MODE (3-BIT) |
| 8B010 P31A050 | DIRECT (BINARY 011) | ATTITUDE-CONTROL MODE (3-BIT) |

| | | |
|---|---|---|
| 1P010P33 B25 | TCA NO.1 | THRUSTER FIRING SYSTEM A |
| 2P010P33 B26 | TCA NO 2 | THRUSTER FIRING SYSTEM A |
| 3P010P33 B27 | TCA NO.3 | THRUSTER FIRING SYSTEMA |
| 4P010 P33 B28 | TCA NO,4 | THRUSTER FIRING SYSTEMA |
| 5P010 P33 B29 | TCA NO 5 | THRUSTER FIRING SYSTEM A |
| 6P010P33 B30 | TCA NO6 | THRUSTER FIRING SYSTEMA |
| 7P010 P33 B31 | TCA NO 7 | THRUSTER FIRING SYSTEM A |
| 8P010P33 B32 | TCA NO.8 | THRUSTER FIRING SYSTEM A |
| 1P010 P34 F25 | TCA NO, 1 | THRUSTER FIRING |
| 2P010 P34F 26 | TCA NO,2 | THRUSTER FIRING |
| 3P010 P34F 27 | TCA NO. 3 | THRUSTER FIRING |
| 4P010P34 F 28 | TCA NO 4 | THRUSTER FIRING |
| 5P010P34F 29 | TCA NO.5 | THRUSTER FIRING |
| 6P010P34F 30 | TCA NO. 6 | THRUSTER FIRING |
| 7P 010P34F 31 | TCA NO. 7 | THRUSTER FIRING |
| 8P010P34F 32 | TCA NO 8 | THRUSTER FIRING |
| 1B010P35 A059 | PITCH RATE SCALE FACTOR | DATA COMPUTER CONTROL |
| 2B 010P35 A 060 | ROLL RATE SCALE FACTOR | DATA COMPUTER CONTRUL |
| 3B 010 P35 A 061 | YAW RATE SCALE FACTOR | DATA COMPUTER CONTROL |
| 4B 010 P35A062 | COMPUTER ON/OFF | DATA COMPUTER CONTROL |
| 5B010P35A 063 | PLATFORM ON/OFF | DATA COMPUTER CONTROL |
| 6 B010P 35A064 | EQUIP. SECTION SEPARATION | RETROGRADE |
| 7B010P 35A065 | HORIZON SENSOR (PRI) ON/OFF | DATA COMPUTER CONTROL |
| 8B010P35A 066 | HORIZON SENSOR (SEC) ON/OFF | DATA COMPUTER CONTROL |

| | | |
|---|---|---|
| 1P010P41B33 | TCA NO. 1 | THRUSTER FIRING SYSTEM B |
| 2P010P41B34 | TCA NO, 2 | " " " |
| 3P010P41B35 | TCA NO, 3 | " " " |
| 4P010P41B36 | TCA NO, 4 | " " " |
| 5P010P41B37 | TCA NO. 5 | " " " |
| 6P010P41B38 | TCA NO. 6 | " " " |
| 7P010P41B39 | TCA NO 7 | " " " |
| 8P010P41B40 | TCA NO. 8 | " " " |
| 1P010P42F33 | TCA NO 9 & 10 | THRUSTER FIRING |
| 2P010P42F34 | | |
| 3P010P42F35 | TCA NO 11 & 12 | THRUSTER FIRING |
| 4P010P42F36 | | |
| 5P010P42F37 | TCA NO. 13 | THRUSTER FIRING |
| 6P010P42F38 | TCA NO 14 | THRUSTER FIRING |
| 7P010P42F39 | TCA NO. 15 | THRUSTER FIRING |
| 8P010P42F40 | TCA NO. 16 | THRUSTER FIRING |
| 1B010P43A067 | | |
| 2B010P43A068 | | |
| 3B010P43A069 | OFF (BINARY 001) | PLATFORM MODE 3 BIT BINARY |
| 4B010P43A070 | CAGE (SEF) (BINARY 010) | PLATFORM MODE 3 BIT BINARY |
| 5B010P43A071 | SEF (BINARY 011) | PLATFORM MODE 3 BIT BINARY |
| 6B010P43A072 | | |
| 7B010P43A073 | | |
| 8B010P43A074 | PHOTOGRAPHIC EVENT EXPERIMENT NO. 1, 2 & 8 | |

| | | |
|---|---|---|
| 1B010 P45 B17 | PITCH RATE GYRO, SEC ON/OFF | DATA COMPUTER CONTROL |
| 2 B010 P45 B18 | ROLL RATE GYRO, SEC ON/OFF | DATA COMPUTER CONTROL |
| 3 B010 P45 B19 | YAW RATE GYRO SEC ON/OFF | DATA COMPUTER CONTROL |
| 4B010 P45 B20 | BIO-MED T.R. No.1 ON/OFF | DATA COMPUTER CONTROL |
| 5 B010 P45 B21 | UP | TRANSLATION CONTROL |
| 6 B010 P 45 B22 | DOWN | TRANSLATION CONTROL |
| 7B010 P 45 B23 | RIGHT | TRANSLATION CONTROL |
| 8 B010 P45 B24 | LEFT | TRANSLATION CONTROL |
| 1B010 P46F17 | | |
| 2B010 P46F18 | | |
| 3B010 P46F19 | | |
| 4B010 P46F20 | | |
| 5B010P46F21 | | |
| 6 B010 P46 F22 | | |
| 7 B010 P46F23 | | |
| 8 B010 P46F24 | | |
| 1 B010 P47A051 | CRYOGENIC GAGING ON/OFF | DATA COMPUTER CONTROL |
| 2 B010 P47A052 | | |
| 3 B010 P47A053 | ASTRONAUT ACTUATE ABORT | ABORT |
| 4 B010 P47A054 | RIGHT EJECTION SEAT GONE | ABORT |
| 5 B010 P47A055 | LEFT EJECTION SEAT GONE | ABORT |
| 6 B010 P47A056 | ACCELEROMETER MALFUNCTION | MALFUNCTION DETECTION |
| 7 B010 P47A057 | ATTITUDE MALFUNCTION | MALFUNCTION DETECTION |
| 8 B010 P47A058 | COMPUTER MALFUNCTION | MALFUNCTION DETECTION |